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**(54) WELDING WIRE FEED DEVICE****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To enable stabilized welding in processes of normal welding, arc generation and a transient state at the time of dearcing by controlling a push motor so that a welding wire between the push motor to feed a welding wire and a pull motor is constantly kept in a slack state.

**SOLUTION:** A push servo motor 6a of a wire feed device of an articulated arc welding robot 1 generates a torque enough to stably rotate a wire reel 3, on the other hand a pull servo motor 7a has smaller inertia and faster speed than the push motor. The push servo motor 6a is controlled so that a welding wire slack B quantity, which is obtained by time-integrating a wire feed speed difference between the push servo motor 6a and the pull servo motor 7a, is in a prescribed range. At the same time, a wire extension and a dynamic wire feed speed of a welding torch 2 tip are controlled in a range of a prescribed welding wire slack B quantity.

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